Blowing Sand in the Arabian Gulf

By LCdr. Mike Saling

Almost four months into deployment, we hadn't yet hit "hump day." Our flight-deck crew had been working nonstop in support of real-world operations and day-night training evolutions. The flight-deck crew was operating at optimum proficiency and had been extremely professional in supporting the daily air plan. However, with a brief loss of situational awareness (SA) on the part of an embarked helicopter crew, our many successes almost were overshadowed by a close call.

After a few days of operating in the central Arabian Gulf in the hot temperatures of June, USS *Iwo Jima* (LHD-7) was headed into a meteorological phenomenon commonly found in the Middle East: blowing sand. Daytime flight operations were relatively unhindered, but visibility on the bridge was limited to three to five miles. As flight operations continued into nighttime, the radar indicated our ship was headed toward a solid line of blowing sand. We tried to maintain optimum winds for flight operations, while transiting to our nighttime "gator box."

The ship encountered the line of sand shortly after the aircraft in the flight pattern had transitioned to night-vision devices (NVDs). The Air Boss was working one AH-1W and two CH-46 helicopters in a night visual-flight-rules (VFR) NVD pattern. A Navy HH-46 helicopter was in starboard delta as the search-and-rescue (SAR) aircraft.

Minutes before the incident, the SAR helicopter crew told the Air Boss they needed to land for fuel. They also requested permission to cross the bow to set up for landing on one of the forward spots. The Air Boss cleared them to cross the bow but asked them to extend their upwind leg on the starboard side before crossing the bow to facilitate launching the other three aircraft into the pattern. As the SAR aircraft crew acknowledged the call from the Air Boss, the AH-1W and two CH-46s were cleared to take off for reentry into the night NVD-landing pattern.

The situation began to unwind slowly as the SAR aircraft cut short his upwind leg the Air Boss had requested and turned crosswind (across the bow) earlier than expected. The forward visibility in the LHD tower is poor, and the Air Boss made a judgment call to launch the other three aircraft after telling his plan to the airborne SAR aircraft crew. The AH-1W and the two CH-46s from spots seven and nine were cleared to take off. They were directed

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Photo composite

to take interval behind the SAR aircraft and each other. Four helicopters now were entering the port Charlie pattern for landings on various spots on the flight deck. Because of LHD NATOPS restrictions, which require aircraft to land behind each other on the flight deck while using NVDs, the SAR aircraft would be the first one the Air Boss cleared to land.

Here's where things went awry. Because the SAR aircraft had turned crosswind and entered downwind earlier than expected, it had reached an abeam position of its desired landing spot earlier than expected. The Air Boss could not turn the SAR aircraft to its base leg for landing until the last CH-46 had cleared the flight deck. This situation put the SAR aircraft deep on its downwind at the 180.

The SAR aircraft was cleared "Charlie spot five" by the Air Boss and began its turn toward the ship. Meanwhile, the AH-1W went deep on the downwind, with interval for its intended landing on spot six. The Air Boss cleared it to "continue for spot six, your traffic short final to spot five."

The aircrew of the AH-1W acknowledged the call and reported traffic in sight as it began turning inbound to spot six. The third aircraft in the line was the first CH-46. He was cleared to continue for spot seven "with interval an AH-1 on a 'long' final to spot six." The CH-46 pilot rogered the call to continue and started his turn to the 90 without acquiring a visual on the AH-1W in front of him. The CH-46 pilot called "Roger" and turned inbound to land on spot seven. As the AH-1W turned final, the pilot turned off his overt anti-collision light as required by LHD NATOPS.

Disaster almost occurred as the crew of the AH-1W were recovering from their deep downwind and were approaching the flight deck at almost a 30-degree recovery angle. At the same time, the CH-46, inbound to spot seven, was approaching at a normal 60-degree angle to the flight deck. Both aircraft were converging on the same airspace. Fortunately, the crew of the AH-1W recognized the dangerous situation and took immediate action with a quick, right-hand banking turn to cross the stern of the ship and enter the safety of starboard delta. After the close call, the CH-46 aircrew took a waveoff to spot seven and reentered the portside landing pattern. The fourth and final CH-46 made an uneventful landing on spot seven.

After a lap in the pattern, the close-call CH-46 was cleared for a landing to spot nine. Since spots six and seven are not adjacent on an LHD, the AH-1W then reentered the Charlie pattern, and the Air Boss cleared him for a "Charlie spot six." With all four aircraft now safely back on deck, the decision was made to call it a night.

Nighttime NVD operations are standard practice aboard our ship, but the blowing sand and the decreased visibility was something new to everyone. Pilot reports of worsening visibility and their difficulty identifying the outline of the ship with NVDs at two miles should have raised a flag for everyone involved with the flight operations.

The principles of operational risk management include continuous reevaluating if conditions change. In this case, everyone was aware of the blowing sand, but the conditions progressively had worsened as the night went on.

The chain of events that led to this potential mishap could have been broken if:

- The pilots had recognized the increased risks because of the reduced visibility, or
- the SAR aircraft crew had obtained the interval desired by the Air Boss, or
- the AH-1W pilot had not been forced to fly deep on its downwind leg, or
- the CH-46 actually had had the AH-1W in sight before turning inbound for landing, or
- the Air Boss had made sure that the CH-46 had the AH-1W in sight before giving him clearance to turn base.

Elimination of these ifs would have turned flight ops into just another night for the embarked ACE. The quick reaction of the AH-1W aircrew meant this close call will only exist in the memory of those involved and those who read this story.

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